

**Mobilization of the Mateless: The Association Between Perceived Access to Mates, Radical
Political Activism, and Mental Health**

Jeremia Sjöblom 41146

Master's Thesis in Psychology

Supervisors: Jan Antfolk, Annika Gunst, Catharina Walldén

Faculty of Arts, Psychology, and Theology

Åbo Akademi University, August 2022

Table of Contents

Mobilization of the Mateless: The Association Between Perceived Access to Mates, Radical Political Activism, and Mental Health..... 1

 Female Choice and Human Mate Selection..... 1

 Access to Mates and Wellbeing..... 2

 Changing the Mating Pool 3

 The Current Study..... 4

Methods..... 4

 Ethical statement..... 4

 Participants and procedure..... 4

 Measures 5

 The Mate Access Scale 5

 The Mate Value Scale..... 6

 The Activism and Radicalism Intention Scale..... 6

 The Positive Mental Health Scale..... 7

 Statistical Analyses 7

Results..... 8

 Descriptive Results 8

 Correlations..... 9

 Measurement Model 10

 Structural Regression Model..... 11

 Comparison between groups..... 12

Discussion..... 13

 Mate Value and Activism 13

 Mate Access and Activism..... 13

 The Manosphere..... 14

 Limitations 15

MATE ACCESS, RADICAL POLITICS, AND MENTAL HEALTH

Recommendations for Future Studies	16
Conclusion	16
Summary in Swedish – Svensk sammanfattning.....	17
Metod	19
Resultat	20
Diskussion.....	21
References.....	23

Subject: Psychology	
Author: Jeremia Sjöblom	
Title: Mobilization of the Mateless: The Association Between Perceived Access to Mates, Radical Political Activism, and Mental Health	
Supervisors: Jan Antfolk, Annika Gunst, Catharina Walldén	
Abstract: Recent terror perpetrated by men who struggle to find women mates and with the aim of changing the norms regulating the dating market raises the question of how access to a mate affects men's motivation to use political power to increase their mate access. Based on an evolutionary framework, we investigated the association between mate access and mate value with activism intention and radicalism intention in 160 adult men. We also compared individuals identifying with the manosphere—a loosely organized group of men with a, often misogynist, focus on gender relations— and men who did not. We found that there was an association between how many potential mates the men encountered in daily life and greater activism intention. We also found that lower perceived mating possibilities was associated with greater activism intention. The former result went against our expectations, while the latter result supported our hypothesis. Lastly, we found that individuals identifying with the manosphere reported worse mental health compared to other men. Future studies should seek to clarify why different factors of mate access affect activism intention differently as well as investigate the link between worse mental health and participation in groups with a radical political agenda.	
Keywords: Mate Value, Mate Access, Activism, Radicalism, Men, Mental Health	
Date: 1.8.2022	Page count: 28

ÅBO AKADEMI – FAKULTETEN FÖR HUMANIORA, PSYKOLOGI OCH TEOLOGI

Ämne: Psykologi	
Författare: Jeremia Sjöblom	
Title: Mobilisering av de partnerlösa: associationen mellan upplevd tillgång till partners, radikal politisk aktivism och mental hälsa	
Handledare: Jan Antfolk, Annika Gunst, Catharina Walldén	
Abstrakt: Terrordåd som begåtts av män som haft svårt att hitta en partner med syftet att förändra normerna för partnerval väcker frågan hur mens svårigheter att hitta en partner påverkar deras vilja att använda politiskmakt för att öka sin möjlighet att hitta en partner. Baserat på ett evolutionspsykologiskt ramverk undersökte vi sambandet mellan partnertillgång och partnervärde med aktivismintention och radikalismintention hos 160 vuxna män. Vi jämförde också individer som identifierade sig med manofären, en löst organiserad grupp män med ett, ofta kvinnofientligt, fokus på relationen mellan könen, och män som inte gjorde det. Vi fann ett samband mellan fler föredragna möten med potentiella partners och större aktivismintention. Vi fann också att färre upplevda parningsmöjligheter var associerat med större aktivismintention. Det första resultatet gick emot vår hypotes, medan det andra resultatet stödde vår hypotes. Slutligen, fann vi en signifikant skillnad i mental hälsa mellan män som identifierade sig med manofärgrupperna och män som inte identifierade sig med manofärgrupperna. De som identifierade sig med manofärgrupperna hade sämre mental hälsa. Framtida studier bör undersöka riktningen på dessa resultat och ytterligare klargöra varför olika faktorer för partnertillgång inverkar olika på aktivismintention. Framtida studier bör också undersöka sambandet mellan sämre psykisk hälsa och deltagande i extremistiska internetgrupper.	
Nyckelord: Partner värde, tillgång till partners, aktivism, radikalism, män, mental hälsa	
Datum: 1.8.2022	Sidantal: 28

Acknowledgment

Foremost I would like to thank my excellent trio of supervisors, Jan Antfolk, Annika Gunst and Catharina Walldén for guiding me through the process from the start to the finish. I would also like to thank Julia Andersson for the cooperation during the start of the process. The number of friends that have helped me through this process are too numerous to be mentioned here, but I will extend a special thanks to Elin Sjöström for helping me with the writing process while stuck in Karis and to Jakob Langenskiöld for always being available to discuss matters both scientific and existential. A last thanks to my girlfriend Stina Oja for helping me keep my house in order during this quite hectic spring.

Mobilization of the Mateless: The Association Between Perceived Access to Mates, Radical Political Activism, and Mental Health

In recent years, there has been an increased media focus on men, and in particular young men, who commit violent acts targeting women as a group. Most of the focus has been on the so-called involuntary celibates (*incels*), which is a label the incels choose themselves (Ging, 2019). The label incel has been used by several persons who have committed mass killings (Hoffman et al, 2020) and persons associated with the label have been considered an extremism threat by the US Secret Service (National Threat Assessment Center, 2022). The Canadian Police have tried a mass killing believed to have been motivated by the incel group as a terrorist case (Royal Canadian Mounted Police, 2020). Although only a small part of the incel group has committed acts of mass violence, the discourse among even the nonviolent members of the group is critical of contemporary society (Center of Extremism, 2018) and the members are pessimistic and deterministic in their views on gender relations (Hoffman et al., 2020). Qualitative analysis indicates that many members justify violence as a means to generate political change (O'Donnell & Shor, 2022). As the incels' main criticism against modern society seems to stem from their perceived inability to find a mate (Hoffman et al., 2020), the focus on generating political change raises the question of how men's limited access to a mate is associated with a willingness to participate in different political acts, both legal ones, and radical ones. The incel group can be seen as a part of a larger, but loosely connected, community called the manosphere. The manosphere is connected through different internet forums and social media, and holds anti-feminist values (Ging, 2019). They vary in their approach to gender relations, some being more misogynist than others, and there is a major overlap of members in all groups (Ribeiro et al., 2020).

Female Choice and Human Mate Selection

According to Trivers' (1972) *parental investment theory*, women's minimal investment (nine months of gestation, birth, and breastfeeding) in a potential offspring is much greater than that of men (a single act of sexual intercourse). Because of this difference in initial parental investment, women have had an increased evolutionary pressure to be more selective in potential mates (Trivers, 1972). This difference in choosiness also makes women comparatively rigorous with respect to the traits that are sexually selected for in men (Puts, 2010). *Female choice* is therefore a key aspect of heterosexual mating. Indeed, there is evidence that heterosexual mating in humans is more in line with women's than men's preferences (Antfolk et al., 2015), indicating that men adapt to women's preference to be

chosen as a mate. Women are also less likely to be involuntary single (Apostolou et al., 2019), and less likely to actively seek a relationship while single (Pew Research Center, 2020).

There are also sex differences in the preferred characteristics of a mate between men and women (Buss, 1998; Haselton et al., 2005). For example, compared to men, women tend to put more value on high social status (Pérusse, 1994) and potential for resource acquisition (Buss, 1989). Higher income predicts marriage and re-marriage in men, but not in women (Fieder & Huber, 2007; Hopcroft, 2021). Men, therefore, are driven to pursue status and wealth to increase their value as potential mates and increase the chances of finding a mate (Ben Hamida et al., 1998). Importantly, unrestricted female choice means that several women can choose to mate with a select group of attractive high-status men, leaving less appealing men at risk of being completely outside the mating pool.

Several different concepts have been introduced to describe and measure the ability to attract and find a mate. *Mate value* is one's appeal as a potential mate to someone of the opposite sex (Brase & Guy, 2004). *Mate value* only considers personal characteristics, so to get a broader appraisal of the likelihood of finding a mate it is relevant to also consider the social context. *Mate access* describes the number of encounters with potential mates and the extent to which a person perceives actual mating possibilities with persons they encounter (Walldén et al., 2020).

Access to Mates and Wellbeing

Finding a mate is evolutionarily fundamental. As reproduction arguably is the most effective means of passing on genetic material to subsequent generations, there has been a very strong selection on active strategies to pursue potential mates. Accordingly, we expect that the psychological adaptations involved in this also include negative psychological reactions to not finding a mate. A romantic mate is often an important source of social support, and this seems to be the case, especially for men as men tend to have fewer sources of social support than women (Stronge et al., 2019). According to Stronge et al. (2019), the absence of a romantic mate's social support is also one of the reasons why single men have lower rates of well-being compared to single women. Loneliness has repeatedly been linked to lower psychological well-being and depressive symptoms (Elovainio et al., 2017) as well as to increased mortality (Holt-Lunstad et al., 2015; Leigh-Hunt et al., 2017). Involuntary singlehood is also associated with depression and loneliness (Apostolou et al., 2019). In sum, it seems that limited mate access increases the risk of mental health concerns.

Changing the Mating Pool

If an individual is unable to compete for a mate with their mate value, there are strong incentives to find different strategies to improve their access to mates. One such strategy would be to change one's local environment to increase one's mate access. For example, there is ample evidence of changes in mating strategy when there is an imbalance in the local sex ratio (e.g., Stone et al., 2006; Taylor, 2013). These include more choosiness among the sex, of which there are fewer (Stone et al., 2006). There are also more indirect changes such as men becoming more economically impulsive, such as choosing more short-sighted and expedient ways of acquiring money when there is an abundance of other men in the area as this abundance also increases expectations for men to use more resources during mate seeking (Griskevicius et al., 2012). There is also an association between male-biased sex ratios and high income inequality, and increased incel activity (Brooks et al., 2022) suggesting that in unequal societies with relatively few women, men are more likely to organize around questions of unwanted singlehood.

As having and finding social relationships is important for a person's wellbeing, repeated rejections can lead to an increased rejection sensitivity (Downey & Feldman, 1996). Rejection sensitivity predicts feelings of loneliness (Watson & Nesdale, 2012; Gao et al., 2017) and is associated with depression and anxiety (Gao et al., 2017). Rejection and rejection sensitivity are also associated with increased aggression (Gao et al., 2019; Quarmley et al., 2022) and some experiments indicate a causal relationship between rejection and aggression (Leary et al., 2006). Furthermore, aggression predicts political violence (Jahnke et al., 2021) and is associated with radicalization (Emmelkamp et al., 2020). Lastly, rejection and rejection sensitivity are associated with a higher likelihood to associate with extremist groups (Renström et al., 2020). Thus, aggression can be viewed as a way to influence others or establish control (Leary et al., 2006). Here we investigate the possibility that such aggression, in combination with a motivation to avoid loneliness, can spark willingness to commit radical acts to influence society to counteract female choice and increase the likelihood that all men find at least one woman mate.

Historically, there is some evidence of men trying to restrict women's ability to choose their mate (Apostolou, 2007; Smuts, 1995). A study by Reiss (1986b; as cited in Baumeister & Twenge, 2002) indicated that a greater male-biased power disparity correlates with increased sexual suppression of women. Thus, increased male political power would give them a greater opportunity to control women's sexual freedom. For men who otherwise

would have low mate value or low mate access, this sexual suppression of women could be a viable strategy when direct methods of increasing mate access are not possible.

As access to a mate is a vital part of reproductive success, we argue that both direct and indirect strategies to increase one's mate access would be favored by natural selection. We postulate that one of these indirect ways of changing one's mate access is trying to affect norms and policy. We, therefore, assume that men with lower mate access would have a greater incentive to have a radical political ideology. We also assume that this activation, in some extreme cases, might take the form of radicalization, as is anecdotally evidenced by incel motivated mass killings.

The Current Study

In the present study, we investigated the association between mate access and willingness to participate in political activity and radical acts. We also investigated the association between mate value and willingness to participate in political activity and radical acts. The hypothesis was that men's low mate access and low mate value would be associated with a greater willingness towards political activity and radical acts. Based on the association between access to a mate and mental health and radicalization, we also explored whether there was a difference in mate access, mate value, mental health, and willingness to participate in political activity and radical acts, between persons that identify with groups related to the manosphere and men who did not identify with these.

Methods

Ethical statement

The current study received ethical permission from the Ethical Committee of the Departments of Psychology and Speech and Language Pathology at Åbo Akademi University. We asked participants for informed consent before they started the survey.

Participants and procedure

The current study was part of a larger survey that was created and hosted on a secure online survey platform. Data were collected from January 2021 to April 2021. We gathered informed consent from all respondents before they could proceed with the survey. We informed the respondents that the purpose of the survey was to investigate men's romantic and sexual relationships, mental health, attitudes towards women, and political activity, and informed them about anonymity and secure storage of the data. To proceed with the survey we also asked if the participants were romantically or sexually interested in women, as this

was a central part of the study. Respondents were also informed that participation was voluntary and that they could quit at any moment without giving a reason. The survey was published on different social media sites. To recruit participants, we used Facebook and Reddit, as well as other online forums, which by their content would seem appealing to men. Such sites were, for example, sites about dating advice for men or men's health. We also asked respondents to share the survey further in their own circles. We also tried to find sites and forums that were appealing to men that were likely to identify with the manosphere groups. These were forums discussing men's rights or giving dating advice to men.

Four hundred forty-four men started the survey, and of these 172 male respondents completed the survey. The completion rate was 38.74%. Four of the 172 respondents had mutually exclusive answers, answering that they belonged to different manosphere groups while also answering that they did not belong to any group, and we thus excluded these participants. Six respondents were underage and were therefore excluded from the analysis. Lastly, two respondents were excluded because they did not answer all questions included in the analyses. The total sample was 160. Most respondents (86.88%) reported that they were 18-34 years of age.

Measures

We asked the respondents to provide demographic data. Following that, four different questionnaires were used to collect the data for this study: The Mate Access Scale (Walldén et al., 2020), the Mate Value Scale (Edlund & Sagarin, 2014), the Activism and Radicalism Intention Scale (Moskalenko & McCauley, 2009) and the Positive Mental Health Scale (Lukat et al., 2016). In the last part of the questionnaire, the respondents were asked if they identify with any of the following groups: men's rights activist, "men going their own way", "pick up artist", involuntary celibate, women's rights activist, radical feminist, or none of the above. The first four are subgroups related to the manosphere based on Ribeiro et al. (2020). The reason for including women's rights activists and radical feminists was to try to make it less obvious that we were interested in the manosphere groups. Respondents could choose several of these groups simultaneously.

The Mate Access Scale

To measure the respondents' self-perceived experience of their opportunity in finding a mate, we used the Mate Access Scale developed by Walldén et al. (2020). The questionnaire consists of two different factors: preferred encounters with potential mates (five items) and perceived mating possibilities (six items). Items are rated on a 4-, 5-, or 7-point

Likert scale. A higher score on the questionnaire indicated more encounters with potential mates and a higher perceived mating possibility. Examples of questions are “Do you receive as many romantic invitations (e.g., someone asking you out) as you would desire (or even more than you would desire)?” and “In your everyday life, do you meet as many potential partners as you want to?”

The Mate Value Scale

To assess the respondents’ overall selective fitness, we used the Mate Value Scale (Edlund & Sagarin, 2014) in tandem with the Mate Access Scale. There are several ways to measure mate value. We used a holistic and unidimensional measure, based on the assumption that an individual can sufficiently accurately estimate their own mate value (Brase & Guy, 2004; Edlund & Sagarin, 2014). The questionnaire consists of four items about the respondent’s self-perceived appraisal of their mate value. The items are rated on a seven-point Likert scale and a higher score indicates a higher appraisal of the respondent’s own mate value. Examples of questions are “Overall, how do you believe you compare to other people in desirability as a partner on the following scale?” and “Overall, how good of a catch are you?” The questionnaire has demonstrated an excellent Cronbach’s alpha level between .86 and .92 (Edlund & Sagarin, 2014). It has also been shown to be a reliable and valid way to measure mate value (Edlund & Sagarin, 2014).

The Activism and Radicalism Intention Scale

To assess the different degrees of willingness to commit either actions for inter-group political activism or actions more consistent with political radicalism (illegal or violent action), we used the Activism and Radicalism Intention Scale (Moskalenko & McCauley, 2009). The scale consists of two different questionnaires: the Activism Intention Scale, which contains four items about a person’s intention to participate in non-violent and legal political activity for one’s group, and the Radicalism Intention Scale, which contains six items about a person’s intention to participate in illegal or violent action for a group. Examples of questions are “I would donate money to an organization that fights for my group’s political and legal rights” for the Activism Intention Scale. An example of the questions for the radicalism intention scale is “I would participate in a public protest against oppression of my group even if I thought the protest might turn violent”. A higher score on the seven-point Likert scale indicates a greater degree of willingness to commit politically motivated actions. The survey can be used in two ways, either by asking people to identify with a group, as in our case with the manosphere groups, or that a group is selected for them based on previous knowledge, as

in our case with men in general (Fodeman et al., 2020). Both the Activism Intention Scale and the Radicalism Intention Scale have demonstrated acceptable Cronbach's alpha levels between .60 and .89 (Moskalenko & McCauley, 2009).

The Positive Mental Health Scale

To assess the respondents' mental health, we used the Positive Mental Health Scale (Lukat et al., 2016). The scale consists of a unidimensional measure of positive mental health, and is composed of nine items. A lower score on the five-point Likert scale indicates higher positive mental health. An example of a statement is "All in all, I am satisfied with my life." The test has demonstrated an excellent Cronbach's alpha level between .82 and .93 (Lukat et al., 2016). It has also shown to be a reliable and valid measure of positive mental health (Lukat et al., 2016)

Statistical Analyses

We analyzed the data using the *R* platform (R Core Team, 2020). First, we conducted zero-order Spearman's correlations, as the data were ordinal. We created a visualization of the correlations using the *corrplot* package (Wei & Simko, 2021). We also made measurement models for all the different factors. To specify the latent variables, we explored measurement models and specified their model cutoff fit (CFI/TLI > .90 (acceptable) > .95 (good); RMSEA < .08 (mediocre) < .05 (good); SRMR < .08 (good)). Indicators were used to create latent variables. The mate access scale consisted of two different factors: perceived mating possibilities and encounters with preferred mates, the first one consisting of five indicators and the latter consisting of six indicators. Mate value consisted of four indicators. The Activism and Radicalism Intention Scale consists of two different factors: activism intention and radicalism intention, which consist of four, respectively six indicators. We conducted a Structural Equation Model (SEM), specifically a structural regression model using latent factors with the *lavaan* package (Rosseel, 2012). We included perceived mating possibilities, encounters with preferred mates, and mate value as independent variables, and activism intention and radicalism intention as dependent variables.

We conducted a Welch Two Sample T-test to compare the difference in perceived mating possibilities, encounters with preferred mates mate value, mental health, activism intention and radicalism intention between the two groups. The first group consisted of respondents that identified with any one of the groups related to the manosphere (men's rights activist, "men going their own way", "pick up artist", involuntary celibate) and none of the other groups (women's right activist, radical feminist or none). The second group

consisted of those that identified with any of the non-related groups (women's right activist, radical feminist) or that did not identify at all with any label. There were 19 respondents (11.9%) who belonged to the first group and 141 respondents (88.1%) who belonged to the second group.

Results

Descriptive Results

For descriptive results, see table 1.

Table 1

Respondents' Age, Yearly income, Education, Socioeconomic Status, Ethnicity, Nationality, Job status, Sexual Orientation, and Relationship Status.

Variable	<i>n</i>	%
Age		
18-24	64	40.00
25-34	75	46.88
35-44	17	10.63
45-54	2	1.25
55-64	1	0.63
Above 64	1	0.63
Yearly income before tax (USD)		
Below 10 000	51	31.87
10 000-50 000	61	38.12
50 000-100 000	36	22.50
100 000-150 000	5	3.12
Over 150 000	7	4.38
Education		
Less than a high school diploma	1	0.63
High school degree or equivalent/GSCE	55	34.38
Bachelor's degree	61	38.13
Master's degree	33	20.63
Doctorate	6	3.75
Other	4	2.50
Socioeconomic status*		
10	3	1.88
9	7	4.38
8	17	10.62
7	43	26.88
6	22	13.75
5	32	20.00
4	20	12.50
3	8	5.00
2	2	1.25
1	6	3.75
Ethnicity		
Hispanic or Latino	8	4.76
American Indian or Alaska native	0	0.00
Asian	11	6.55
Black or African American	3	1.79
Native Hawaiian or other pacific islander	0	0.00
Caucasian or white	135	80.36

Multiracial	7	4.17
Other	1	0.60
Prefer not to say	3	1.79
Nationality		
European	58	36.25
Asian	8	5.00
North American	76	47.50
South American	6	3.75
Oceanian	10	6.25
African	2	1.25
Job Status		
Employed	85	53.13
Unemployed	15	9.38
Student	47	29.38
Retired	2	1.25
Self-employed	10	6.25
Other	1	0.63
Sexual orientation		
Heterosexual	134	83.75
Bisexual	17	10.62
Pan-sexual	7	4.38
Other	2	1.25
Relationship status		
Married	18	11.20
In a relationship/cohabiting	48	30.00
Single	86	53.80
Dating	8	5.00
Other	0	0.00

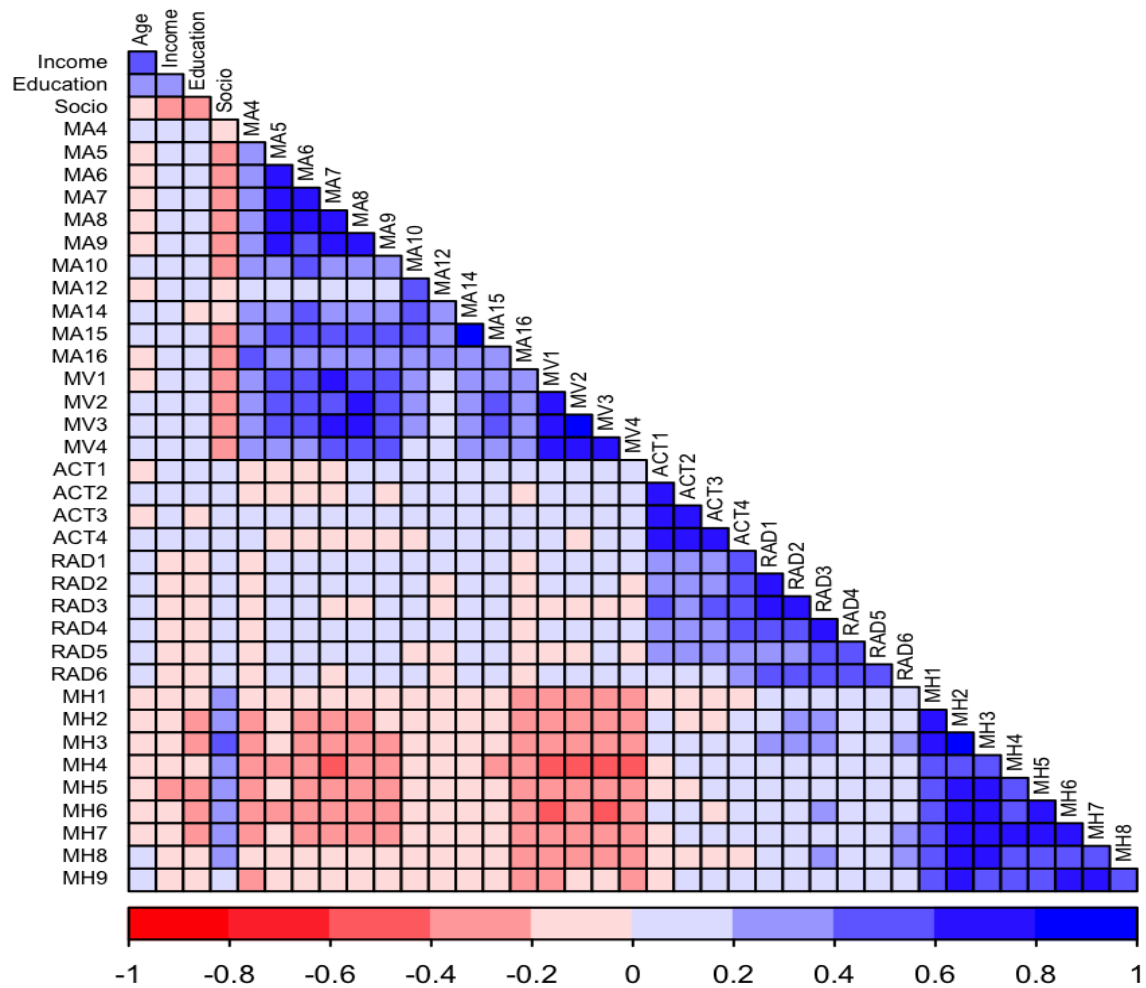
* Respondents were shown a ladder with ten steps to visually represent the different levels of socioeconomic status and were asked where on the ladder they were located. A higher spot on the ladder indicates a higher score, which indicates a higher socioeconomic status.

Correlations

We calculated, plotted, and measured zero-order correlations between all included items in the survey (see Figure 1) using Spearman correlations.

Figure 1

Illustration of Correlations



Note. MA stands for mate access, MV for mate value, ACT for activism intention, RAD for radicalism intention, and MH for mental health. The blue color indicates a positive correlation while red indicates a negative correlation. For MH a negative correlation indicates an association with higher positive mental health.

Measurement Model

For the study, we investigated if mate access and mate value are associated with either activism intention or radicalism intention.

The first model for mate access, consisting of both factors, was suboptimal (comparative fit index [CFI] = .991, Tucker–Lewis index [TLI] = .989, root-mean-square error of approximation [RMSEA] = .133 [.111, .155], standardized root-mean-square residual [SRMR] = .104). We inspected model fit indices and to improve the model, MA15 was dropped because of a negative variance (-.093). We also allowed a residual correlation between MA4 and MA16, which improved the RMSEA and SRMR to acceptable levels (CFI = 1.000, TLI = .999, RMSEA = .020 [.000, .063], SRMR = .070). The model for mate value was acceptable (CFI = 1.000, TLI = 1.000, RMSEA = .020 [.000, .160], SRMR = .016). The model for activism intention and radicalism intention was initially suboptimal with RMSEA being too high (CFI = .993, TLI = .991, RMSEA = .100 [.075, .126], SRMR = .087).

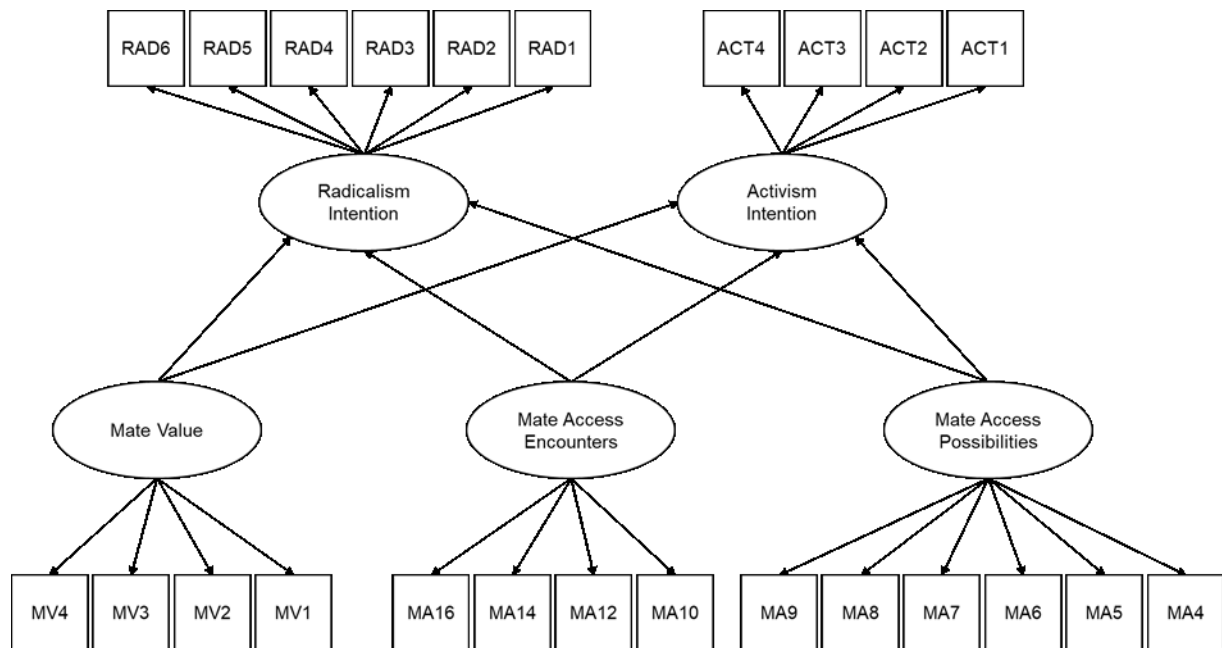
Allowing residual correlations between RAD1 and RAD2, RAD4 and RAD6 as well as RAD1 and RAD4, improved the RMSEA to acceptable levels (CFI = .996; TLI = .994; RMSEA = .080 [.051, .109]; SRMR = .077). By allowing the aforementioned residual correlations, the initial model fit was acceptable (CFI = 1.000, TLI = 1.000, RMSEA = .011 [.000, .034], SRMR = .071).

Structural Regression Model

For clarification of the regression model, see Figure 2.

Figure 2

Illustration of the Structural Equation Model.



Note. The circles represent the latent factors for the questionnaires. Radicalism Intention stands for the Radicalism Intention Scale, Activism Intention stands for the Activism Intention Scale, and Mate Value stands for the Mate Value Scale. Mate Access Encounters and Mate Access Possibilities represent the two factors of the Mate Access Scale. The squares represent the indicators for each latent factor. The arrows from the factors to the other factors show which factors they are regressed on, while the arrows from the factors to the indicators show which indicators are used to create the factors.

For all results from the regression analysis, see Table 2. A higher number of encounters with preferred mates predicted a significantly higher degree of activism intention ($\beta = 0.4, p = .008$). Higher perceived mating possibilities predicted a significantly lower degree of activism intention ($\beta = -0.48, p = .025$).

Table 2*Results from the Structural Regression Models*

Independent variable	Dependent variable	<i>b</i>	β	95% CI	SE	<i>z</i>	<i>p</i>
MA_E	ACT	0.42	.40	[.11; .73]	0.16	2.67	.008
MA_P	ACT	-0.97	-.48	[-1.81; -.12]	0.43	-2.24	.025
MV	ACT	0.25	.26	[-.07; .58]	0.17	1.54	.125
MA_E	RAD	0.04	.03	[-.21; .28]	0.13	0.28	.777
MA_P	RAD	0.27	.13	[.32; .92]	0.33	0.81	.413
MV	RAD	-0.08	-.08	[-.36; .2]	0.14	-0.57	.568

Notes: MA_E stands for encounters with preferred mates. MA_P stands for perceived mating possibilities. ACT stands for activism intention, RAD for radicalism intention, and MV for mate value.

Comparison between groups

For all the results from the T-test, see Table 3. The group that did not identify with any of the manosphere groups had a higher mate value and slightly higher encounters with preferred mates and perceived mating possibilities. These differences were not statistically significant. The difference in positive mental health was significant, with the manosphere group having lower mental health than the other group.

Table 3*Results from the T-test*

Variable	T-value	DF	CI	MANO		NON		<i>p</i>
				<i>M</i>	SD	<i>M</i>	SD	
MA_P	-0.63	20.62	[-4.45; 2.38]	11.16	6.91	12.2	5.01	.536
MA_E	-1.23	22.89	[-1.62; .41]	6.16	2.01	6.76	1.96	.232
MV	-1.47	20.81	[-5.58; .96]	14.16	6.60	16.47	4.95	.156
MH	2.40	21.09	[0.87; 12.15]	30.74	11.37	24.22	8.91	.026
ACT	-1.51	23.53	[-5.95; .93]	11.89	6.79	14.40	7.04	.146
RAD	-0.33	27.30	[-4.50; 3.26]	15.74	7.42	16.35	9.81	.746

Note: MANO stands for the manosphere group while NON stands for the group who did not identify with the manosphere groups. MA_P stands for perceived mating possibilities, MA_E stand for encounters with preferred mates, MV for mate value, and MH for mental health.

Discussion

In this study, we investigated if there was an association between how men perceive their opportunity to find a mate and their willingness to participate in political activity through either activism or radical acts.

Mate Value and Activism

Firstly, we expected an association between a low mate value and greater activism intention or greater radicalism intention among men. Controlling for mate access, there was a non-significant association between *higher* mate value and greater activism intention. That is, with a comparable access to mates, men who report higher mate value were also somewhat more likely to report activism. The association between higher mate value and greater extraversion (Strouts et al., 2017) could explain this, as greater extraversion in turn is associated with increased political activity (Mondak & Halperin, 2008). Another important caveat is that self-reported mate value does not correspond with attractiveness ratings made by others (Arnocky, 2018), meaning that high self-reported mate value might be an artefact of other traits. There was no association between a person's reported mate value and radicalism intention. Thus, neither of the results conform to our hypothesis that low mate value would motivate a person to try to change their access to mates through activism or radicalism.

Mate Access and Activism

Secondly, we expected a low rate of encounters with preferred mates to be associated with greater activism intention or greater radicalism intention among men. Controlling for mate value and the number of mating possibilities, a greater number of encounters with preferred mates was associated with greater activist intention. This was in contrast with our hypothesis. One explanation could, for example, be that a person with more encounters with preferred mates is generally more social and therefore more likely to participate in an activity with other people or that an individual who participates in such social political activity is more likely to meet potential mates. The questions measuring this construct were mostly about the number of people a person meets, (e.g., "How many potential partners do you meet on an average day? Do not count persons you only meet on the internet") and thus a more socially active person would get a higher score. There are several studies linking extraversion and sociability with political activity and participation (e.g., Foschi & Lauriola, 2014; Mondak & Halperin, 2008). There was no statistically significant relationship between encounters with preferred mates and radicalism intention.

Thirdly, we expected lower perceived mating possibilities would be associated with greater activism intention and greater radicalism intention among men. Controlling for mate value and number of encounters, lower perceived mating possibilities were associated with a greater activism intention. This result supported our hypothesis. As perceived mating opportunities mostly considers one's experience of finding a mate, not only meeting individuals of the other sex, it might be a better measure of how a person views their chances of finding a mate compared to encounters with preferred mates. Further study in this area should investigate if factors related to lower perceived mating possibilities are predictive of activism intention. For example, our theory suggests that political activism could be a method of trying to increase mate access by using political power. As the direction of the association is unclear it could also be explained as an individual with low perceived mating possibilities being more motivated to participate in different social activities, including things such as protests or political gatherings. Higher perceived mating possibilities was associated with greater radicalism intention, though this was not statistically significant. This could indicate that the association of perceived mating possibilities works differently as a motivator for activism intention as compared to radicalism intention. Instead of seeing radicalization as a conveyor belt where one moves from more moderate acts and groups to more radical acts and groups, it could also be that the activism and radicalism in themselves have entirely different pathways (Moskalenko & McCauley, 2009).

The Manosphere

When comparing men identifying with manosphere groups with men not identifying with these groups, we found only one significant difference. Men identifying with the manosphere groups had significantly lower scores on mental health compared to those that did not identify with these groups. This could indicate that mental health is a better indicator of identifying with these groups instead of mate value or mate access, even though these latter concepts are central to their ideology (Ging, 2019). As extremism and extremism beliefs are related to mental illness (Bhui et al., 2020; Harpviken, 2019; Misiak et al., 2019) one could assume that mental illness would be associated with participation in extremism groups. Our study, however, found that the respondent identifying with the manosphere groups did not differ from others in their activism intention or radicalism intention. Thus, our study seems to indicate, that even though a person identifies with extremist groups (Ging, 2019) there is no increased will to participate or perform any political or radical acts. Further

studies should therefore investigate the link between worse mental health and participation in extremist internet activity.

Limitations

There are several limitations to this study. First, there was quite a high dropout rate, which affects the extent to which you can generalize the result of this study. Most of the respondents dropped out during the first part of the survey during the demographic questions. This might be either due to a poor layout of the questions or due to something specific to the questions. These dropouts were in parts of the survey where the respondent had to click to go to the next page, and therefore, it might have been that they chose not to continue after the first pages. We cannot rule out that some other factor was in common for those that dropped out, thus having an effect on the generalizability of the study, as those that completed the survey might have something else in common, which might not have been investigated in this study.

The measure used to measure activism intention and radicalism intention was quite narrow in scope. This is something that is common among questionnaires about activism and radicalism (Scarcella et al., 2016). The Activism Intention Scale and Radicalism Intention Scale focus on participation in acts of activism or acts of radicalism, and thereby does not take into account other aspects of activism and radicalism, such as psychological or ideological aspects. Even though the scales we used are valid and reliable, it is worth noting that had we used a different questionnaire the result of the study might have been somewhat different.

There was also a small sample for the group comparison, with the manosphere group only consisting of 19 individuals while the control group was several times larger. The small sample size affects the extent to which we can see them as representative of their group. The reason for such a sample can partially be explained by the guarded nature of the sites these groups frequent. Reaching out to them resulted in not being allowed to post on their forum, and we, therefore, had to use indirect methods of trying to get respondents from these groups. Further research on these groups should therefore try to build trust with participants in these groups to get a larger sample of participants. This was also a preliminary study of this subject, and while therefore more exploratory, it still sheds light on which factors, in this case, mental health, are of note when investigating the radicalism of the manosphere.

Recommendations for Future Studies

In this study, we found an association between higher encounters with preferred mates and greater activism intention. Further research should focus on the causal direction of this association, and to test whether sociability is an important explaining factor.

We also found an association between lower perceived mating possibilities and greater activism intention. As we found support for the association with having a harder time finding a mate with greater activism intention; future studies should focus on the motivation behind this, such as men actively trying to regulate women's rights to increase their mate access.

Lastly, with the growth of the manosphere movements on the internet, it is important to investigate which factors motivate a person to identify with these movements. The current study indicated a difference in mental health between the extremism groups and the control group, and therefore the psychological well-being of men's rights activists should be addressed by research.

Conclusion

Overall, there seems to exist an increased focus by several radical right-wing groups on the lack of access to mates for men in the sexual marketplace. To investigate the effect of low access to a mate we conducted a study to see how the perception of mate availability is associated with activism intention and radicalism intention. There was a statistically significant association between a greater number of encounters with preferred mates and greater activism intention, which could be explained by sociability. There was also a statistically significant association between lower perceived mating possibilities and greater activism intention, this is in line with our hypothesis and further research should investigate the direction of this association. There was also a group difference in mental health factors with the manosphere groups having a lower mental health score than the group who did not identify with the manosphere groups, but due to the small sample size for the manosphere, one should be careful when generalizing this.

Summary in Swedish – Svensk sammanfattning

Mobilisering av de partnerlösa: Associationen mellan upplevd tillgång till partners och vilja till politisk aktivitet och radikalism, samt mental hälsa

Under de senaste åren har det skett flera massmord där förövaren varit en självutnämnd incel (ofrivilligt celibat eng, involuntary celibat)(Ging, 2019). Endast en liten del av incel-rörelsens medlemmar är våldsamma, men även de icke-våldsamma medlemmarna är kritiska mot samhället (Center of Extremism, 2018) och har en pessimistisk och deterministisk syn på förhållandet mellan könen (Hoffman et al., 2020). De rättfärdigar dessa våldsattentat bland annat genom att se dessa som en väg till att skapa politisk förändring (O'Donnell & Shor, 2022). En central del av incels kritik mot det moderna samhället är deras oförmåga att hitta en partner (Hoffman et al., 2020). Detta väcker frågan om hur mäns möjlighet att hitta en partner påverka deras vilja att delta i olika politiska handlingar. Incels ingår i en större grupp som kallas manosfären (Ging, 2019). Denna internetbaserade grupp har antifeministiska värderingar (Ging, 2019), men medlemmarna varierar i hur kvinnofientliga de är (Ribeiro et al. 2020). Manosfären väcker frågan om hur mäns begränsade tillgång till en partner är kopplad till mäns vilja att delta i politisk aktivitet, eller i vissa fall, begå mer radikala handlingar för att skapa politisk förändring.

Enligt Trivers (1972) teori om föräldrainvesteringar tenderar kvinnor att vara mer selektiva än män i sitt val av en partner. Enligt denna teori är kvinnors minimiinvestering i en potentiell avkomma mycket större än männens (Trivers, 1972). På grund av denna skillnad i initial investering har kvinnor haft ett starkare evolutionärt tryck att vara mer selektiva än män i valet av potentiella partners (Trivers, 1972). Denna skillnad i inledande investering ger kvinnor en större roll i utformningen av sexuellt urval genom att välja vilka egenskaper som ses som värdefulla hos en potentiell partner (Puts, 2010). Kvinnligt val (eng. "female choice") är därmed en central aspekt för heterosexuell parning. Det finns bland annat stöd för att heterosexuell parning bland människor är mera i enlighet med kvinnors preferenser än med mäns preferenser (Antfolk et al., 2015). Denna selektivitet kan observeras i könsskillnader i vilka egenskaper man föredrar hos en potentiell partner (Buss, 1998; Haselton et al., 2005). Till exempel tenderar kvinnor, jämfört med män, att lägga mera värde på hög social status (Pérusse, 1994) och potential att anskaffa resurser (Buss, 1989). Män har därmed ett större tryck att sträva efter status och resurser för att öka sitt partnervärde och för att därmed öka sin chans att hitta en partner (Ben Hamida et al., 1998). Obegränsat kvinnligt

urval innebär därmed att flera kvinnor kan välja att para sig med attraktiva män av hög status, vilket leder till att män med lägre status är i risk för att lämna utan parningsmöjligheter.

Det finns flera olika koncept vi kan använda oss av för att undersöka mäns möjlighet att hitta en partner. Partnervärde (eng. "mate value") är en uppskattning av en persons värde som potentiell partner för någon av det motsatta könet (Brase & Guy, 2004). Partnervärde tar bara hänsyn till personliga egenskaper, och för att få en mer heltäckande bedömning är det relevant att beakta det sociala sammanhanget. Tillgång till partners (eng. "mate access") kan definieras som antalet möten med potentiella partners och i vilken utsträckning en person upplever sig ha möjlighet att para sig med personer han eller hon möter (Wallden et al, 2020).

En nära partner är ofta en viktig källa till socialt stöd (Stronge et al., 2019). Ensamhet har upprepade gånger kopplats till lägre psykiskt välbefinnande, depressiva symtom (Elovainio et al., 2017), och till ökad dödlighet (Holt-Lunstad et al., 2015; Leigh-Hunt et al., 2017).

Människor har ett incentiv att hitta en partner och om de inte aktivt kan tävla om partners på grund av sitt låga partnervärde så ökar incentivet att finna nya strategier för att få tillgång till en partner. En av dessa strategier är att ändra på den lokala miljön på ett sätt som ökar en persons tillgång till potentiella partners. Det finns gott om stöd för att det uppkommer förändringar i parningsstrategi när det finns en obalans i könsfördelningen i ett område (t.ex. Stone et al., 2006; Taylor, 2013). Detta inkluderar mer valfrihet av partners för det kön som det finns färre av (Stone et al., 2006), men också mer indirekta förändringar som att män gör mera kortsiktiga val för att få tag på pengar när det finns ett överflöd av andra män i det nära området (Griskevicius et al., 2012). I en studie på Twitter-aktivitet och incel-teman kom man fram till att de förekom mest diskussion om dessa teman i regioner med mansdominerad könsfördelning och stora inkomstskillnader (Brooks et al. al., 2022).

Även om det är viktigt för en persons välbefinnande att ha och finna sociala relationer, så kan upprepade avslag leda till en ökad avvisningsskänslighet (Downey & Feldman, 1996). Avvisningsskänslighet och avvisningar är kopplade till ensamhet (Watson & Nesdale, 2012; Gao et al., 2017), depression, ångest (Gao et al., 2017), ökad aggression (Gao et al., 2019; Quarmley et al., 2022) och till en större sannolikhet att vara associerad med extrema grupperingar (Renström et al., 2020). I denna studie undersöker vi ifall aggression och vilja att undvika ensamhet kunde väcka ett ökat intresse för radikala handlingar med avsikt att genom detta begränsa kvinnligt val.

Det finns också historiskt stöd för att män har begränsat kvinnors möjlighet att välja sina partners (Apostolou, 2007; Smuts, 1995). En studie av Reiss (1986b; citerad i Baumeister & Twenge, 2002) tyder på att en större maktskillnad, till mäns fördel, mellan män och kvinnor korrelerar med begränsning av kvinnors sexuella frihet. Därmed skulle ökad politisk makt hos män ge dem större möjlighet att reglera kvinnors sexualitet. För män som har låg partnertillgång kan detta vara en möjlig strategi när direkta metoder för att öka partnervärdet inte är möjliga.

I och med att tillgång till en partner är en central del av den reproduktiva processen så argumenterar vi för att naturligt urval kommer att stärka både direkta och indirekta strategier för att öka ens tillgång till partners. Enligt argumenten lagda fram i texten så argumenterar vi för att ett sätt att indirekt påverka sin tillgång till partner är genom att förändra den politiska miljön man befinner sig i. Därmed kan man anta att män med lägre partnervärde och lägre tillgång till partners skulle ha ett större incitament att delta i politiska aktiviteter. Det antas i den aktuella undersökningen att denna aktivering i vissa sällsynta fall också kan ta form av mer våldsamma och radikala handlingar, som kan observeras i fallen av incel motiverade mass mord

I den aktuella studien undersöktes sambandet mellan partnervärde och tillgång till partners, med viljan att delta i politisk aktivitet och begå radikala handlingar. Hypotesen var att låg tillgång till partners och lågt partnervärde hos män skulle vara associerat med större vilja till politisk aktivitet och radikala handlingar. Det undersöktes också om det fanns en skillnad i partnervärde, tillgång till partners, mental hälsa, aktivismintention och radikalismintention mellan individer som identifierar sig med manofärgrupperingarna och män som inte identifierade sig med dessa.

Metod

Den aktuella studien erhöll etiskt tillstånd från etiska nämnden vid institutionerna för psykologi och logopedi vid Åbo Akademi. Vi bad deltagarna om informerat samtycke innan deltagarna började fylla i enkäten.

Samplet till studien samlades in via en nätenkät som publicerades på olika online forum som till sitt innehåll kunde tänkas vara tilltalande för män. För att delta i studien skulle man identifiera sig som man och vara över 18 år. Man skulle också vara sexuellt eller romantiskt attraherad av kvinnor. Det totala samplet blev slutligen 160. De flesta svarande (86,9 %) var mellan 18 och 34 år.

Vi bad deltagarna att besvara demografiska frågor. Därefter användes fyra olika frågeformulär för att samla in data för denna studie: Mate Access Scale (Walldén et al, 2020) som mäter tillgång till partners och innehåller två olika faktorer. Den ena faktorn mäter hur många potentiella partners man möter i sin vardag (möten med föredragna partners) och den andra faktorn mäter hur många av dessa potentiella partners man kunde tänka sig att man själv, eller de, är romantiskt eller sexuellt intresserad av (upplevda parningsmöjligheter). Mate Value Scale (Edlund & Sagarin, 2014) mäter ens självuppskattade värde som potentiell partner. Activism and Radicalism Intention Scale (Moskalenko & McCauley, 2009) är två olika skalor där den ena mäter aktivismintention, som kan ses som en persons villighet att delta i politisk aktivism, t.ex. lagliga protester, och den andra, radikalismintention, mäter ens villighet att delta i politiskt radikala handlingar, t.ex. våldsamma demonstrationer. Positive Mental Health Scale (Lukat et al., 2016) mäter ens positiva mentala hälsa. I slutet frågades deltagarna ytterligare ifall de identifierar sig med olika grupperingar, syftet var att se om de identifierade sig med grupperingar som tillhör manofären.

Vi analyserade data med hjälp av R-plattformen (R Development Core Team, R. F. F. S. C., 2008). Vi utförde en strukturell ekvationsmodell (eng. structural equation model SEM). I den strukturella regressionsmodellen inkluderade vi upplevda parningsmöjligheter, möten med föredragna partners och partnervärde som oberoende variabler, och aktivismintention och radikalismintention som beroende variabler.

Resultat

För att analysera data skapade vi en SEM-modell med 5 stycken latent variabler. Dessa var upplevda parningsmöjligheter (5 indikatorer), möten med föredragna partners (6 indikatorer), partnervärde (4 indikatorer), intention till aktivism (4 indikatorer) och intention till radikalism (6 indikatorer). Sedan utförde vi en strukturell regression där vi regrederade de 2 beroende variablerna på de 3 oberoende variablerna. Vi fick två statistiskt signifikanta resultat, en association mellan fler möten med föredragna partners och högre aktivismintention och en association mellan fler upplevda parningsmöjligheter och lägre intention till aktivism. Vi utförde även en gruppjämförelseanalys där vi jämförde gruppen som identifierat sig med åtminstone en av manofärgrupperna och ingen annan grupp, med de som inte identifierade sig med någon av manofärgrupperna. Det var 19 respondenter (11,9 %) som tillhörde den första gruppen och 141 respondenter (88,1 %) som tillhörde den andra gruppen. Vi jämförde dem på upplevda parningsmöjligheter, möten med föredragna partners,

partnervärde, mental hälsa, aktivismintention och radikalismintention. I den jämförelsen var det enda statistiskt signifikanta resultatet att de som identifierade sig med manofärggrupperna hade lägre mental hälsa än den andra gruppen.

Diskussion

I denna studie ville vi undersöka om det fanns ett samband mellan upplevelsen av ens möjligheter att hitta en partner och ens villighet att delta i politisk aktivism eller politisk radikalism.

Vi fann ett samband mellan fler möten med föredragna partners och högre intention till aktivism. I och med att möten med föredragna partners för det mesta beror på hur mycket människor man träffar så kan man tänka sig att detta visar på att sociala människor både träffar fler människor och därmed är mer villiga att delta i politiska handlingar.

Vi fann också ett samband mellan färre upplevda parningsmöjligheter och högre intention till aktivism. Detta stämmer överens med vår teori. Män som upplever sig att ha svårigheter med att hitta nya partners för romantiska och sexuella relationer visade sig vara mer intresserade av att delta i politiskt aktiva handlingar.

I gruppjämförelsen fann vi att de som identifierade sig med manofärggrupperna hade lägre mental hälsa än den gruppen som inte identifierade sig med manofärggruppen.

Det fanns flera begränsningar i denna studie. För det första var det flera avhoppar från datainsamlingen (61,27 %). I och med att vi inte vet varför de hoppat av så kan vi inte utesluta att en specifik grupp av människor valt att hoppa av eller fortsätta, vilket kan leda till att de som svarade på studien har något annat gemensamt än det som mättes i studien. För det andra så var de frågeformulär vi använde för att samla in data om aktivismintention och radikalismintention väldigt snäva, något som är vanligt för frågeformulär gällande politisk aktivism och radikalism (Scarcella et al., 2016). Därmed kan man anta att ett annat frågeformulär som i högre grad tagit i beaktande mer psykologiska eller ideologiska faktorer kunde ha gett ett annat resultat. Den tredje begränsningen var att samplet för de individer som identifierade sig med manofärggrupperna var väldigt liten (n=19). Samplet storleken påverkar därmed till vilken grad vi kan se vårt sampel som representativt för manofärggruppen som en helhet. Manofärggrupperna förhåller sig ofta negativt till att bli undersökta av utomstående och de var därmed svåra att nå vid datainsamlings skede, vilket delvis förklarar sampelstorleken.

Framtida studier bör fokusera på den kausala riktningen av tillgång till partner på aktivismintention och på varför tillgång till partner påverkar aktivismintention i olika riktningar. Framtida studier bör också undersöka mental hälsa hos män som deltar i olika extrema internetbaserade grupper.

Sammanfattningsvis, fann vi resultat för att träffa fler föredragna partners ökar ens aktivismintention. Vi fann också att färre upplevda parningsmöjligheter, i enlighet med vår hypotes, var kopplad med ökad aktivismintention. Slutligen, i gruppjämförelsen fann vi att männen som identifierar sig med manofärggrupperna har sämre mental hälsa än männen som inte identifierade sig med dessa grupper.

References

- Antfolk, J., Salo, B., Alanko, K., Bergen, E., Corander, J., Sandnabba, N. K., & Santtila, P. (2015). Women's and men's sexual preferences and activities with respect to the partner's age: Evidence for female choice. *Evolution and Human Behavior*, 36(1), 73–79. <https://doi.org/10.1016/j.evolhumbehav.2014.09.003>
- Apostolou, M. (2007). Sexual selection under parental choice: The role of parents in the evolution of human mating. *Evolution and Human Behavior*, 28(6), 403–409. <https://doi.org/10.1016/j.evolhumbehav.2007.05.007>
- Apostolou, M., Matogian, I., Koskeridou, G., Shialos, M., & Georgiadou, P. (2019). The price of singlehood: Assessing the impact of involuntary singlehood on emotions and life satisfaction. *Evolutionary Psychological Science*, 5(4), 416–425. <https://doi.org/10.1007/s40806-019-00199-9>
- Arnocky, S. (2018). Self-Perceived Mate Value, Facial Attractiveness, and Mate Preferences: Do Desirable Men Want It All? *Evolutionary Psychology*, 16(1), 1-8. <https://doi.org/10.1177/1474704918763271>
- Baumeister, R. F., & Twenge, J. M. (2002). Cultural suppression of female sexuality. *Review of General Psychology*, 6(2), 166–203. <https://doi.org/10.1037/1089-2680.6.2.166>
- Ben Hamida, S., Mineka, S., & Bailey, J. M. (1998). Sex differences in perceived controllability of mate value: An evolutionary perspective. *Journal of Personality and Social Psychology*, 75(4), 953–966. <https://doi.org/10.1037/0022-3514.75.4.953>
- Bhui, K., Otis, M., Silva, M. J., Halvorsrud, K., Freestone, M., & Jones, E. (2020). Extremism and common mental illness: Cross-sectional community survey of White British and Pakistani men and women living in England. *The British Journal of Psychiatry*, 217(4), 547–554. <https://doi.org/10.1192/bjp.2019.14>
- Brase, G. L., & Guy, E. C. (2004). The demographics of mate value and self-esteem. *Personality and Individual Differences*, 36(2), 471–484. [https://doi.org/10.1016/s0191-8869\(03\)00117-x](https://doi.org/10.1016/s0191-8869(03)00117-x)
- Brooks, R. C., Russo-Batterham, D., & Blake, K. R. (2022). Incel activity on social media linked to local mating ecology. *Psychological Science*, 33(2), 249–258. <https://doi.org/10.1177/09567976211036065>
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12(1), 1–14. <https://doi.org/10.1017/s0140525x00023992>

- Buss, D. M. (1998). Sexual strategies theory: Historical origins and current status. *Journal of Sex Research*, 35(1), 19–31. <https://doi.org/10.1080/00224499809551914>
- Center of Extremism (2018) *When women are the enemy: The intersection of misogyny and White Supremacy*. Anti-Defamation League
<https://www.adl.org/resources/reports/when-women-are-the-enemy-the-intersection-of-misogyny-and-white-supremacy>
- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, 70(6), 1327–1343.
<https://doi.org/10.1037/0022-3514.70.6.1327>
- Edlund, J. E., & Sagarin, B. J. (2014). The Mate Value Scale. *Personality and Individual Differences*, 64, 72–77. <https://doi.org/10.1016/j.paid.2014.02.005>
- Elovainio, M., Hakulinen, C., Pulkki-Råback, L., Virtanen, M., Josefsson, K., Jokela, M., Vahtera, J., & Kivimäki, M. (2017). Contribution of risk factors to excess mortality in isolated and lonely individuals: An analysis of data from the UK biobank cohort study. *The Lancet Public Health*, 2(6), 260-266. [https://doi.org/10.1016/s2468-2667\(17\)30075-0](https://doi.org/10.1016/s2468-2667(17)30075-0)
- Emmelkamp, J., Asscher, J. J., Wissink, I. B., & Stams, G. J. (2020). Risk factors for (violent) radicalization in juveniles: A multilevel meta-analysis. *Aggression and Violent Behavior*, 55, 101489. <https://doi.org/10.1016/j.avb.2020.101489>
- Fieder, M., & Huber, S. (2007). The effects of sex and childlessness on the association between status and reproductive output in modern society. *Evolution and Human Behavior*, 28(6), 392–398. <https://doi.org/10.1016/j.evolhumbehav.2007.05.004>
- Fodeman, A. D., Snook, D. W., & Horgan, J. G. (2020). Picking up and defending the faith: Activism and radicalism among Muslim converts in the United States. *Political Psychology*, 41(4), 679–698. <https://doi.org/10.1111/pops.12645>
- Foschi, R., & Lauriola, M. (2014). Does sociability predict civic involvement and political participation? *Journal of Personality and Social Psychology*, 106(2), 339–357.
<https://doi.org/10.1037/a0035331>
- Gao, S., Assink, M., Cipriani, A., & Lin, K. (2017). Associations between rejection sensitivity and mental health outcomes: A Meta-Analytic Review. *Clinical Psychology Review*, 57, 59–74. <https://doi.org/10.1016/j.cpr.2017.08.007>

- Gao, S., Assink, M., Liu, T., Chan, K. L., & Ip, P. (2019). Associations between rejection sensitivity, aggression, and victimization: A meta-analytic review. *Trauma, Violence, & Abuse*, 22(1), 125–135. <https://doi.org/10.1177/1524838019833005>
- Ging, D. (2019). Alphas, Betas, and incels: Theorizing the masculinities of the Manosphere. *Men and Masculinities*, 22(4), 638–657. <https://doi.org/10.1177/1097184x17706401>
- Griskevicius, V., Tybur, J. M., Ackerman, J. M., Delton, A. W., Robertson, T. E., & White, A. E. (2012). The financial consequences of too many men: Sex ratio effects on saving, borrowing, and spending. *Journal of Personality and Social Psychology*, 102(1), 69–80. <https://doi.org/10.1037/a0024761>
- Haselton, M. G., Buss, D. M., Oubaid, V., & Angleitner, A. (2005). Sex, lies, and strategic interference: The psychology of deception between the Sexes. *Personality and Social Psychology Bulletin*, 31(1), 3–23. <https://doi.org/10.1177/0146167204271303>
- Harpviken, A. N. (2019). Psychological vulnerabilities and extremism among western youth: A literature review. *Adolescent Research Review*, 5(1), 1–26. <https://doi.org/10.1007/s40894-019-00108-y>
- Hoffman, B., Ware, J., & Shapiro, E. (2020). Assessing the threat of incel violence. *Studies in Conflict & Terrorism*, 43(7), 565–587. <https://doi.org/10.1080/1057610x.2020.1751459>
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality. *Perspectives on Psychological Science*, 10(2), 227–237. <https://doi.org/10.1177/1745691614568352>
- Hopcroft, R. L. (2021). High income men have high value as long-term mates in the U.S.: Personal income and the probability of marriage, divorce, and childbearing in the U.S. *Evolution and Human Behavior*, 42(5), 409–417. <https://doi.org/10.1016/j.evolhumbehav.2021.03.004>
- Jahnke, S., Abad Borger, K., & Beelmann, A. (2021). Predictors of political violence outcomes among young people: A systematic review and meta-analysis. *Political Psychology*, 43(1), 111–129. <https://doi.org/10.1111/pops.12743>
- Leary, M., Twenge, M., & Quinlivan, E. (2006). Interpersonal rejection as a determinant of anger and aggression. *Personality and Social Psychology Review*, 10(2), 111–132. https://doi.org/10.1207/s15327957pspr1002_2
- Leigh-Hunt, N., Bagguley, D., Bash, K., Turner, V., Turnbull, S., Valtorta, N., & Caan, W. (2017). An overview of systematic reviews on the public health consequences of

- social isolation and loneliness. *Public Health*, 152, 157–171.
<https://doi.org/10.1016/j.puhe.2017.07.035>
- Lukat, J., Margraf, J., Lutz, R., van der Veld, W. M., & Becker, E. S. (2016). Psychometric Properties of the positive mental health scale (PMH-scale). *BMC Psychology*, 4(8).
<https://doi.org/10.1186/s40359-016-0111-x>
- Misiak, B., Samochowicz, J., Bhui, K., Schouler-Ocak, M., Demunter, H., Kuey, L., Raballo, A., Gorwood, P., Frydecka, D., & Dom, G. (2019). A systematic review on the relationship between mental health, radicalization and mass violence. *European Psychiatry*, 56(1), 51–59. <https://doi.org/10.1016/j.eurpsy.2018.11.005>
- Mondak, J& Halperin, K. (2008). A framework for the study of personality and political behaviour. *British Journal of Political Science*, 38(2), 335–362.
<https://doi.org/10.1017/s0007123408000173>
- Moskalenko, S., & McCauley, C. (2009). Measuring political mobilization: The distinction between activism and radicalism. *Terrorism and Political Violence*, 21(2), 239–260.
<https://doi.org/10.1080/09546550902765508>
- National Threat Assessment Center (2022). *Hot Yoga Tallahassee: A Case Study of Misogynistic Extremism*. U.S Secret Service, Department of Homeland Security.
<https://www.documentcloud.org/documents/21417518-secret-service-2018-yoga-class-shooting-case-study>
- Pew Research Center (2020). “Nearly Half of U.S. Adults Say Dating Has Gotten Harder for Most People in the Last 10 Years”. Washington, D.C. retrieved from
<https://www.pewresearch.org/social-trends/2020/08/20/nearly-half-of-u-s-adults-say-dating-has-gotten-harder-for-most-people-in-the-last-10-years/>
- O'Donnell, C., & Shor, E. (2022). “This is a political movement, friend”: Why “incels” support violence. *The British Journal of Sociology*, 73(2), 336–351.
<https://doi.org/10.1111/1468-4446.12923>
- Pérusse, D. (1994). Mate choice in modern societies. *Human Nature*, 5(3), 255–278.
<https://doi.org/10.1007/bf02692154>
- Puts, D. A. (2010). Beauty and the beast: Mechanisms of sexual selection in humans. *Evolution and Human Behavior*, 31(3), 157–175.
<https://doi.org/10.1016/j.evolhumbehav.2010.02.005>

- Quarmley, M., Feldman, J., Grossman, H., Clarkson, T., Moyer, A., & Jarcho, J. M. (2022). Testing effects of social rejection on aggressive and prosocial behavior: A meta-analysis. *Aggressive Behavior*, 1-17. <https://doi.org/10.1002/ab.22026>
- R Core Team (2020). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL <https://www.R-project.org/>
- Renström, E. A., Bäck, H., & Knapton, H. M. (2020). Exploring a pathway to radicalization: The effects of social exclusion and rejection sensitivity. *Group Processes & Intergroup Relations*, 23(8), 1204–1229. <https://doi.org/10.1177/1368430220917215>
- Ribeiro M. H., Blackburn, J., Bradlyn B., Cristofaro E., Stringhini G., Long S., Greenberg S., and Zannettou S., “From Pick-Up Artists to Incels: A Data-Driven Sketch of the Manosphere,” arXiv, June 5, 2020, <https://arxiv.org/abs/2001.07600>.
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Royal Canadian Mounted Police (2020). *Updated charge, young person charged with first-degree murder and attempted murder updated to first-degree murder - terrorist activity and attempted murder - terrorist activity, homicide #12/2020, Dufferin and Wilson Avenue*. <https://www.rcmp-grc.gc.ca/en/news/2020/dufferin-and-wilson-avenue>
- Scarcella, A., Page, R., & Furtado, V. (2016). Terrorism, radicalisation, extremism, authoritarianism and fundamentalism: A systematic review of the quality and psychometric properties of assessments. *PLOS ONE*, 11(12): e0166947. <https://doi.org/10.1371/journal.pone.0166947>
- Smuts, B. (1995). The evolutionary origins of patriarchy. *Human Nature*, 6(1), 1–32. <https://doi.org/10.1007/BF02734133>
- Stone, E. A., Shackelford, T. K., & Buss, D. M. (2006). Sex ratio and mate preferences: A cross-cultural investigation. *European Journal of Social Psychology*, 37(2), 288–296. <https://doi.org/10.1002/ejsp.357>
- Stronge, S., Overall, N. C., & Sibley, C. G. (2019). Gender differences in the associations between relationship status, social support, and wellbeing. *Journal of Family Psychology*, 33(7), 819–829. <https://doi.org/10.1037/fam0000540>
- Strouts, P. H., Brase, G. L., & Dillon, H. M. (2017). Personality and evolutionary strategies: The relationships between HEXACO traits, mate value, life history strategy, and

sociosexuality. *Personality and Individual Differences*, 115, 128–132.

<https://doi.org/10.1016/j.paid.2016.03.047>

Taylor, L. D. (2013). Male Partner Selectivity, Romantic Confidence, and Media Depictions of Partner Scarcity. *Evolutionary Psychology* 11(1), 36-

49. <https://doi.org/10.1177/147470491301100104>

Trivers, R.L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual selection and the descent of man, 1871-1971* (pp. 136–179). Chicago, IL: Aldine. ISBN 0-435-62157-2.

Walldén, C., Westerlund, M., Gunst, A., Santtila, P., & Antfolk, J. (2020). Finding the Mating Gear: The Development and Validation of a Mate Access Scale. *Evolutionary Psychology*. <https://doi.org/10.1177/1474704920935583>

Watson, J., & Nesdale, D. (2012). Rejection sensitivity, social withdrawal, and loneliness in young adults. *Journal of Applied Social Psychology*, 42(8), 1984–2005.

<https://doi.org/10.1111/j.1559-1816.2012.00927.x>

Wei, T, & Simko, V (2021). *R package 'corrplot': Visualization of a Correlation Matrix*. (Version 0.92), <https://github.com/taiyun/corrplot>.

Pressmeddelande

Mobilisering av de partnerlösa: Associationen mellan upplevd tillgång till partners och vilja till politisk aktivitet och radikalism, samt mental hälsa

Pro-gradu avhandling i psykologi

Fakulteten för humaniora, psykologi och teologi, Åbo Akademi

En pro-gradu avhandling i psykologi vid Åbo Akademi har funnit stöd för att män som upplever sig ha färre upplevda parningsmöjligheter har större vilja att delta i politisk aktivism. Det framkom också att män som upplever sig ha fler möten med föredragna partners också hade mer vilja att delta i politisk aktivism. Utöver detta fann vi att män som identifierade sig men manofärgruppen hade sämre mental hälsa när man jämförde dem med andra män.

Vid tolkning av resultat bör det tas i beaktande att studien inte kan ta ställning till riktningen av sambandet eller dess kausalitet. I gruppjämförelsen bör det tas i beaktande att samplet för manofärgruppen var väldigt liten, vilket påverkar hur man kan generalisera detta till gruppen som en helhet. Även frågeformulärens validitet bör tas i beaktande. Evolutionspsykologiska forskningar i hur män upplever sin möjlighet att hitta en partner är kopplat till deras politiska beteende är ett nytt fält och denna forskning ger nu riktning i vilka frågor som är relevanta att vidare utforska.

Avhandlingen utfördes av Jeremia Sjöblom under handledning av Jan Antfolk, PsD, Annika Gunst, PsD och Catharina Walldén, PsM

Ytterligare information fås av: Jeremia Sjöblom

Tel. 044 5120399

Email: jeremia.sjoblom@abo.fi